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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,603	04/29/2005	Thomas Engel	GK-ZEI-3269/500343.20289	4547
26418 REED SMITH,	7590 07/07/200 LLP	EXAMINER		
ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR			SETH, MANAV	
NEW YORK, N		LOOR	ART UNIT	PAPER NUMBER
			2624	
			MAIL DATE	DELIVERY MODE
			07/07/2009	PAPER

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/533,603	ENGEL ET AL.
Office Action Summary	Examiner	Art Unit
	MANAV SETH	2624
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPOWHICHEVER IS LONGER, FROM THE MAILING IF Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailling date of this communication.  If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tid d will apply and will expire SIX (6) MONTHS fron te, cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 16.  2a) This action is <b>FINAL</b> .  2b) Th  3) Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4)  Claim(s) 23-45 and 50-60 is/are pending in the 4a) Of the above claim(s) is/are withdrest solution of the above claim(s) is/are allowed.  5)  Claim(s) is/are allowed.  6)  Claim(s) is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) 23-45 and 50-60 are subject to restrict to the subject to restrict the subject the subject to restrict the subject the subject to restrict the subject the subject the subject the subject the subject the subje	awn from consideration.	
Application Papers		
9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examiration.	ccepted or b) objected to by the e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	ee 37 CFR 1.85(a). pjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bure.  * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	tion No red in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal 6)  Other:	oate

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## **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.1 14

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the allowability of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 16, 2009 has been entered.

## Response to Amendment

- 2. Applicant's amendment filed on April 16, 2009 has been considered and entered in full.
- 3. Applicant amendments to the claims have been entered. In the previous office action mailed on 01/22/2009, claim 23 and all the claims depending on claim 23 were allowed at least by dependency on claim 23. In the amendment filed on 04/16/2009, applicant had significantly amended the claims such that the claim 23 does not recite the same allowed limitations any more, claim 41 which was dependent on claim 23 has now been presented as an independent claim and another independent claim 56 along with its dependent claims have been newly added. Before, only one independent claim (claim 23) was provided for examination, and since claim 23 was allowed, none of the dependent claims were needed to be examined. Claim 41 which was dependent on claim 23 was therefore not required to be examined and is now presented as independent claim. The patentability of application/claims is defined by the independent claim(s) and as per the amendment provided in the instant amendment, all independent claims are different and have different subject matter, therefore these claims as filed are subject to the election/restriction requirements.

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Election/Restrictions

4. The application contains claims 23-45 and 50-60 directed to the following patentably distinct

species:

Species I. Claims 23-40 and 50-54 describe the invention which is directed to evaluating

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the image quality which includes recording plurality of image sample, improving the quality of these

image samples and determining characteristic numbers that are characteristic of deformation of

wavefront deformation caused by the imaging system

Species II. Claims 41-45 and 55 describe the invention which is direction to evaluating

the image quality with respect to amplitude distribution and phase front distribution which further

requires exchanging the known sample for a sample which is to be examined and whose optical

characteristics are still unknown.

Species III. Claims 56-60 describe the invention which is directed to evaluating image

quality with request to image sample characteristics which further includes separating images of the

measured image stack from corresponding images of the simulated image stack to obtain images of

the measured image stack that are freed from the characteristics of the imaging system.

The species are independent or distinct because claims to the different species recite the

mutually exclusive characteristics of such species. In addition, these species are not obvious variants

of each other based on the current record.

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali, can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Manav Seth/ Art Unit 2624 July 5, 2009